



Developing a Logic Model to Guide Evaluation

**SAMHSA's Center for the Application
of Prevention Technologies**



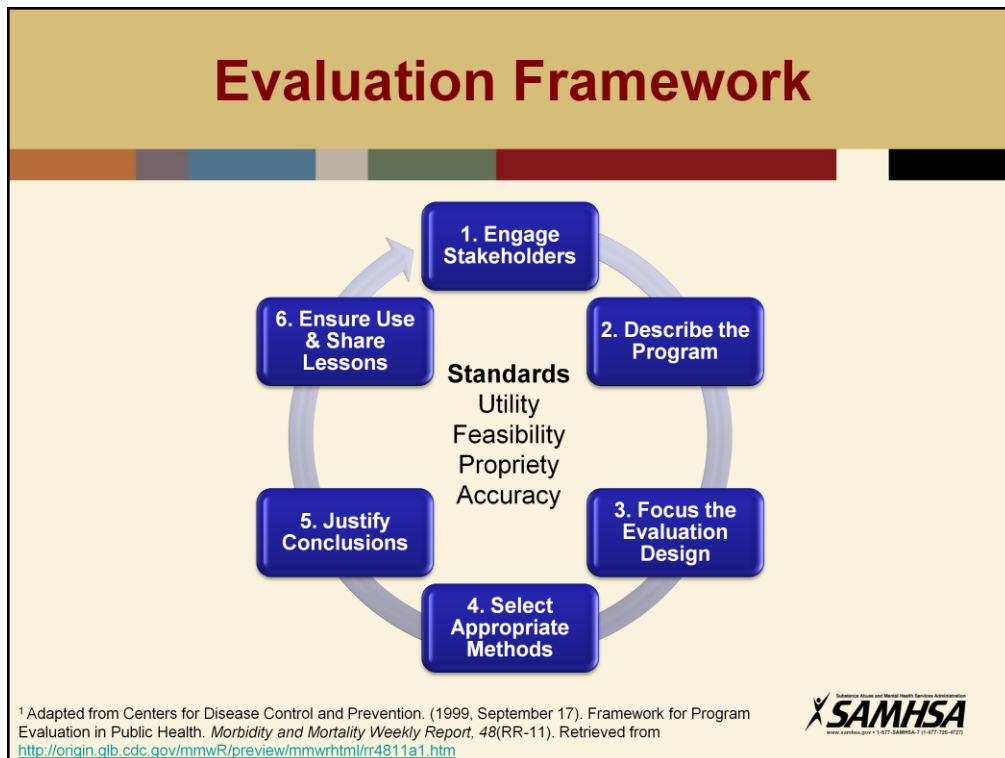
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We will use this framework to compose an evaluation plan. This webinar will focus on Step 2 of the Framework—how to provide descriptive information about your program that encompasses goals, objectives, and outcomes, as well as exposes assumptions, in a concise/succinct visual format. This, in turn, will drive Step 3 of the Framework—the focus of your evaluation design.

Learning Objectives

- Identify logic model benefits
- Appreciate different types of logic models
- Define key components of a logic model
- Understand how logic models inform program evaluation
- Apply lessons learned to your own logic model development or refinement



At the conclusion of this webinar, you will be able to:

- Identify the many benefits to preparing a program logic model.
- Appreciate that there are different types of logic models as well as different logic model components.
- Define key components of a program logic model.
- Understand how logic models inform not only program planning, but also evaluation planning and implementation.
- Apply lessons learned to your own logic model development or refinement

Blueprint for Success

Goals
Objectives
+ Activities

Results



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The image on the slide offers an analogy for what a logic model is.

As the picture suggests, a logic model is the blueprint that leads us—via visual instruction—to results. In this case, the result is a house. The same holds true in the case of prevention programs: it is the logic model that leads us to our outcomes.

There are several definitions of logic models. The Community Toolbox states that “effective logic models make an explicit, often visual, statement of the activities that will bring about change and the results you expect to see for the community and its people.” - Work Group for Community Health and Development. (2013). *Community tool box*. Retrieved from <http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/logic-model-development/main>

The W.K. Kellogg Foundation notes that “The program logic model is defined as a picture of how your organization does its work – the theory and assumptions underlying the program. A program logic model links outcomes (both short- and long-term) with program activities/processes and the theoretical assumptions/principles of the program.” - W.K. Kellogg Foundation. (January 2004). *Logic model development guide: Using logic models to bring together planning, evaluation, and action*. Retrieved from <http://www.wkkf.org/knowledge-center/resources/2006/02/wk-kellogg-foundation-logic-model-development-guide.aspx>

A logic model is a visual tool intended to communicate the logic, or rationale, behind

building an effective program. Think of it as a description of what a program is expected to achieve AND how it is expected to work. A kind of roadmap, describing where you are, where you are going, and how you will get there. And, in the case of our house, it is a map linking together a project's goals, objectives, and activities, inclusive of assumptions... such as the supplies will be available for us to build and the house proposed will hold 4 people and a dog. So, too, with prevention programs, we will assume we have the resources adequate to make our program run and it will have the impacts intended on the people we hope to engage in our program.

Benefits of a Logic Model

- Develops understanding
- Helps expose assumptions
- Helps monitor progress
- Helps restrain over-promising
- Facilitates project reporting
- Promotes communication
- Serves as an evaluation framework

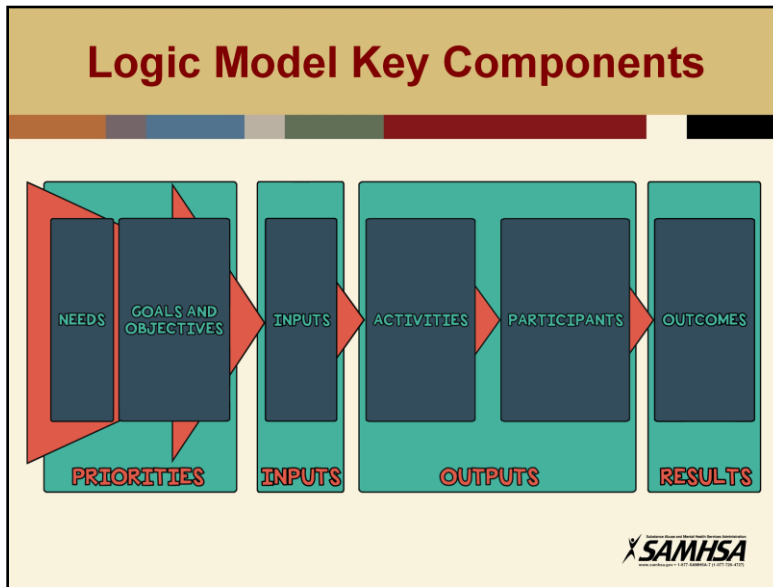


Few people—other than evaluators—relish the idea of developing a logic model. But there are many good reasons to build one.

- First, a good logic model offers a rational argument for why your program is likely to succeed. By clearly laying out the tasks of program development, implementation, and evaluation, a logic model can help you explain what you do and why you do it. (This is a great consensus builder among stakeholders... allows all to operate on the same assumptions.)
- By taking what's in your head and putting it on paper, logic modeling can also help you discover any gaps in your reasoning or places where your assumptions might be off-track. The sooner these mistakes or holes are discovered, the easier they are to remedy.
- A good logic model also makes developing an implementation and/or evaluation plan much easier, by making explicit your expected outcomes, as well as the program elements that will lead to these outcomes. This, in turn, helps a program monitor progress and restrain over-promising on its deliverables or expected outcomes.
- It can facilitate project reporting by narrowing the focus of intended results, given theory base. Your reports should not go outside the scope of your work stated within a logic model.
- Additionally, it can serve as a communication tool to some of your identified

stakeholders. Remember, in session two, we discussed a wide variety of invested partners that could influence the design of your evaluation. A logic model makes concrete where your program is going and why.

- A logic model will help us identify what we want to see change and what we want to measure. It will also help us develop evaluation questions and, in the process, focus our evaluation design.



Here is an example of a logic model.

This model represents a combination of the University of Wisconsin Extension Logic Model and the Kellogg Model/s (for those of you familiar with those models). Web links to access the Kellogg Foundation's and University of Wisconsin's logic modeling approaches can be found on a reference slide included at the end of this presentation.

We realize that some of you have already developed logic models for your programs, perhaps using a different framework from the one we will present here. But we invite you to give this framework a try. There, of course, is more than one right way, if you've already have a preferred style. But what's nice about this is that it is geared toward helping you enhance your evaluation efforts. Eventually, it's likely that you will need to develop several different models, to serve different purposes.

The logic model we're presenting today emphasizes seven components:

Your Priorities

1. **Needs:** Why is your program needed? Why does it matter?
2. **Goals:** What, in general, will your program accomplish in the long run to address this need? Goals speaks to the overarching mission of your program. And, may not be achieved during the operation of your program (distal to program's operation).
3. **Objectives:** What specific changes do you anticipate will result from participation in your program? Objectives identify your focus population, the direction and amount of change anticipated and the timeframe for completion.

Your Inputs

4. **INPUTS:** What do you need to deliver the program -- to meet your goals and objectives? What do you need to invest to deliver the program? Money? Knowledge? Training? Approval?

Your Outputs

5. **ACTIVITIES:** What kinds of activities will you implement to facilitate these changes? What specific tasks will your program undertake during program operation?
6. **PARTICIPANTS:** Who are you trying to reach to induce change? Who will participate in, or be influenced by, the program?

Step 1: Describing Need

- What is the problem?
- What are the **consequences** of the problem?
- What **factors contribute** to the problem?
- What **gaps exist in addressing** the problem?



The first step in developing your logic model is to describe why your program is needed. Much of “describing the problem” is what you did in the “program rationale” section of your application. We are going to spend more time on this step, then move more quickly through the remaining steps. And, here’s why . . .

A needs statement can very well be the most complex and time consuming component in the development of a logic model and is generally more thoroughly described through narrative. Indeed, entire logic models have been dedicated to depicting program need. That’s because need is often represented as an interaction between problem behaviors, those factors that contribute to such behaviors, and the consequences of the behaviors . . . as well as the extent to which problem behaviors and their contributing factors are addressed by other programs or services for the populations you care about. Here, we want to focus on four specific categories to help you illustrate need. These are:

- What is the problem? The main problem of interest—that could be a behavior, it could be an attitude, it could be a community characteristic such as too many liquor stores per square mile.
- What are the consequences? Why this problem matters—What are the consequences of the problem? What’s the burden—are a great number of people affected (scope), are the consequences severe or especially costly for individuals and for society (severity), does the problem affect some groups more than others (disparities), and is the problem on the rise or getting worse (trends)? Remember those stakeholders? Why do they care about this?
- What factors contribute to this problem? What alleviates the problem? What exacerbates it? What protects individuals? What places them at risk of developing this problem?
- How do your efforts fill a gap in services or meet a need with regard to this problem and the populations you serve? Does it address an area that your state, tribe, or jurisdiction has designated as a

priority?

Many programs describe need in terms of a problem, such as high rates of underage drinking or substance use among the elderly. Others object to the assumption of an initial problem. Instead of looking to solve a problem, they want to build on the positive experiences and personal qualities that young people need to grow up healthy. In other words, they want to build assets. An example of an asset-based program might be one that aims to increase adolescents' civic engagement. In this presentation, we'll use the term "problem" broadly to include any condition that you hope to change.

Identifying Risk and Protection



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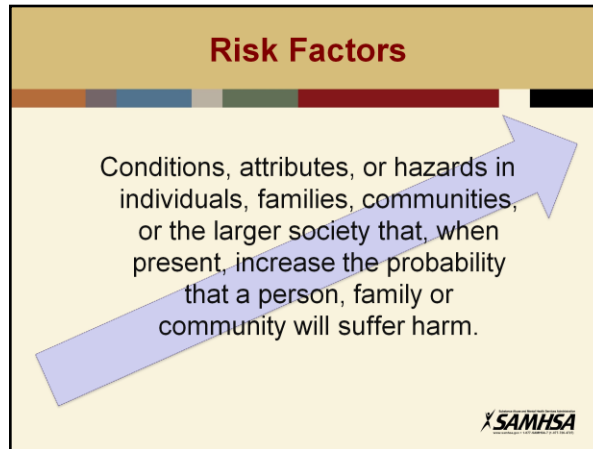
Now, I'd like to spend a little more time discussing risk and protective factors and how these are especially relevant to logic model development.

Consider how you would answer this needs statement question: What factors contribute to this problem? After you describe your problem, you will want to identify specific factors that contribute to it. For example, Let's say that the problem you want to focus on is high rates of drug use among students at the local high school. A major consequence of such drug use may be high drop out rates. Data show strong associations between drug use and school drop-out. But to address this problem, you'll want to know: *Why* are young people using drugs? Is there a low perception of risk? Is drug use socially acceptable? Is there nothing else for teens to do on the weekends but use drugs? **THESE ARE FACTORS** that contribute to the problem of high rates of drug use among high school students.

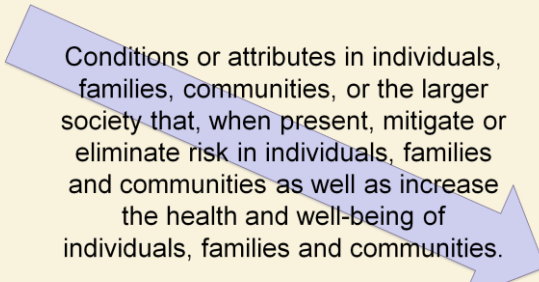
The clearer you are about *why* your problem exists, *in your community*, the easier it will be to develop appropriate programmatic goals.

Remember: Risk factors are factors that could put a person at risk for substance abuse—they could be individual characteristics or factors related to family, or school/community. *Protective factors* protect a person from substance abuse and build their resilience.

Now we will move to building a logic model that illustrates how activities intend to address risk and protective factors which will likely influence change.




Remember: Definitions of risk factor vary. The emphasis is on increasing probability of harm or poor outcomes.



Protective Factors

Conditions or attributes in individuals, families, communities, or the larger society that, when present, mitigate or eliminate risk in individuals, families and communities as well as increase the health and well-being of individuals, families and communities.

* U.S. Department of Health & Human Services, Administration for Children and Families. (n.d.). Protective factors. Retrieved from <https://www.childwelfare.gov/sam/factors/protective.cfm>



Remember: The importance of protective factors is that they mitigate or buffer risk factors.

Identifying Innovation



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In the context of building your, a needs statement should document the extent to which the problem you're focusing on, including its risk and protective factors and population served, is not currently being addressed. Or how your program is different than past approaches addressing similar problems.

If the problem is *not* being adequately addressed, then why isn't it? Is it because yours is the first program to identify the problem in this way? Or is it because you've hit on a problem – like heroine use in some suburban communities—that people would rather not acknowledge?

In other words, It's important to know where your program fits relative to other programs already underway, and to anticipate the extent to which your program will be supported by your organization and/or community.

Example: SOS Need Statements

- Suicide among adolescents aged 15-19 was the third leading cause of death for this age group in the U.S.
- Key risk factors include suicidal thoughts, depression, no awareness of signs of suicide. Protective factors are help seeking behaviors and schools that support help seeking.
- Several diverse programs have been implemented at the high school level, but few have been rigorously evaluated.
- Furthermore, many of these programs are complex, long-term and difficult to implement in school settings.

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H. (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



Let's take a look at a sample needs statement. This is the SOS program. Note that it is not a substance abuse prevention program. It is a suicide prevention program. However, we are going to use it here to illustrate the different components of a logic model.

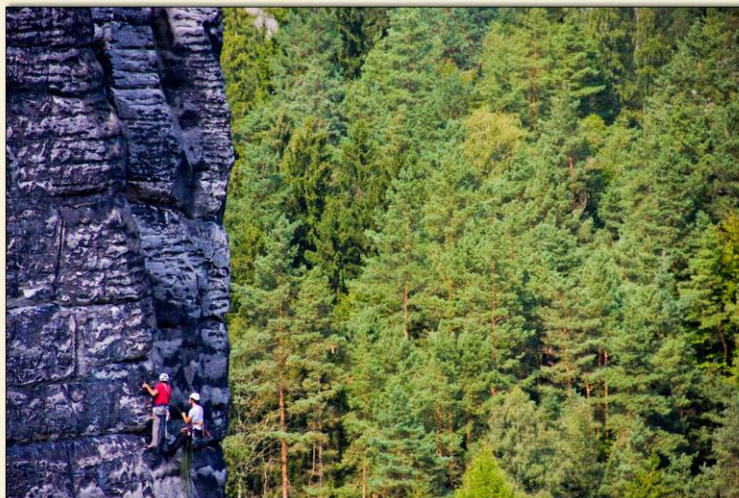
To establish the burden of the problem, SOS states that the annual incidence of suicide attempts among adolescents and young adults aged 15 to 24 exceeds the state average.

Factors shown or thought to predict or are associated with suicide and suicide attempts include suicidal thoughts, depression, lack of awareness/understanding about signs of suicide, reluctance to seek help, school environments not supportive of help-seeking.

SOS also asserts that, while several diverse programs have been implemented at the high school level, few have been rigorously evaluated.

Furthermore, many of these programs are complex, long-term and difficult to implement in school settings.

Step 2: Defining Goals



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Step 2 is defining goals.

Once you have described the need for your program, you will want to develop one or more goals that describes what you want to see changed. Your goals describe the intended long-term outcomes of your initiative in large, broad terms.

What long-term change does your program intend?

Your goals should be tied directly to your overarching needs statement. So, for example, if your identified problem is high rates of alcohol use among 13-15 year olds in your community, a relevant goal would be to reduce alcohol use among youth ages 13–15 years in your community. Similarly, goals might be tied to consequences. So, let's say that the consequences of alcohol use among 13–15 years old is early initiation of sexual activity or greater likelihood of school drop out, then those might be your goals—to reduce early sexual activity or school drop out.

Sounds obvious, right? It should! That's the beauty of a logic model—that the different facets be so well-linked that they seem obvious. Here, your well-researched and clearly-defined needs statement leads to your goals. Clear goal statements are important for making sure everyone involved in your program is on the same page and heading in the same direction.

Example: SOS Goal Statement

To reduce suicidal behavior among high school students (grades 9-12) in three school districts.



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⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H.. (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



SOS's goal is to reduce suicidal behavior (suicide, suicide attempts) among students in grades 9-12, in three school districts.

Step 3: Specifying Objectives

What specific changes do you anticipate will result from participation in your program?

Objectives should be SMART:

- Specific (what will change)
- Measurable (by how much/directional)
- Achievable (will be feasible and useful)
- Realistic (the resources are available)
- Time-bound (by when)

⁵ Centers for Disease Control & Prevention. (2012, November 2). *Develop SMART objectives*. Retrieved from http://www.cdc.gov/phcommunities/resourcekit/evaluate/smart_objectives.html



Once you've specified your goal or goals, you will want to develop your program objectives.

Objectives should be thought of as intervening factors – the things you need to change first in order to achieve your goals. So, let's say your goal is to change behavior. Then your objective might be to change attitudes and beliefs related to that behavior – if these have been identified as contributing factors. *May want to mention that objectives should be linked to risk and protective factors.*

Objectives should describe the specific, *quantifiable* changes you expect to see in your focus population as a result of your program.

They should describe what will change, by how much, will be attainable, for whom and by when.

Objectives aren't general statements about improvement. They must be specific and measurable.

Sometimes it's helpful to imagine a news article about your program. The lead paragraph is likely to include who you are, what you do, how you'll do it, and by when. These are your objectives.

Remember, if you have more than one goal, you will need to develop separate objectives for each goal.

Example: SOS Short-term Objectives

- To increase the percentage from baseline of students in grades 9-12 who report improvements in knowledge *and* beliefs about depression and suicide.
- To increase the percentage from baseline of students in grades 9-12 who report feeling able to seek assistance for depression.

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H., (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



SOS has two short-term objectives.

The first is to increase the percentage, from baseline, of students in grades 9-12 who report improvements in knowledge *and* attitudes about depression and suicide.

The second is to increase the percentage, from baseline, of students in grades 9-12 who report feeling able to seek assistance for depression.

Example: SOS Long-term Objectives

- To increase the percentage, from baseline, of students who report seeking help for depression or suicide.
- To reduce the percentage from baseline of students who report a suicide attempt or suicide ideation during the past 3 months.

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H.. (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



SOS also has two *long-term* objectives.

First, they want to increase, from baseline, the percentage of students who report seeking help for depression or suicide.

They also want to reduce, from baseline, the percentage of students who report a suicide attempt or suicidal ideation during the past 3 months.

See how these short- and long-term objectives are related to their risk and protective factors that we identified earlier? If you recall, risk factors included suicide ideation, depression, lack of understanding/awareness of signs of suicide, and reluctance to seek help.

Step 4. Identifying Inputs

Inputs are those preparations or resources required to implement your program.



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Step 4 is to identify inputs. These include the general preparations or resources one might make or need in order to deliver a program, such as trained staff, implementation guides, curricula, expertise, clear roles and responsibilities, funding, permission to implement.

Example: SOS Inputs

- Develop teaching materials (video and discussion guide) that demonstrate and promote help-seeking behaviors related to depression and suicidal behavior
- Identify and adapt self-screening tool that helps students assess and evaluate the depressive symptoms and suicidal thoughts they might be experiencing
- Train clinical staff to implement the program
- Obtain parental permission for student participation

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H.. (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



Back to our example . . .

SOS describes what might be considered specific kinds of inputs (rather than more general inputs, such as funding). These are the tasks they must do before they can even implement the program.

One input is to develop teaching materials, including a video and discussion guide, that demonstrate and promote help-seeking behaviors related to depression and suicidal behavior.

Another is to identify and adapt self-screening tools that help students assess and evaluate the depressive symptoms and suicidal thoughts they might be experiencing.

A third is to train clinical staff to implement the program.

A fourth is to obtain parental permission for student participation.

Step 5. Outlining Activities

- Detail activities—critical program components—that must be maintained without alteration to ensure program effectiveness.
- Detail the target audience for these activities.

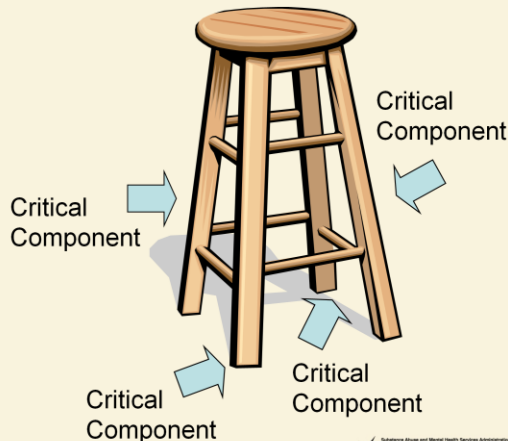


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OK. Step 5.

How will your activities address those factors that contribute to the problem? Activities are the things that you do to reach your objectives.

People often expect this part of the logic model to be the easiest to complete, since it's where you get to write down what you do. In actuality, this section of the model is often the hardest for programs to complete. Not only do you need to explain what you're doing, but you need to explain why you've made these choices; why you think these activities will help you ultimately reach your goal. This is where you need to be explicit about the assumptions that drive your activities.

Think of your program as a four-legged stool. If you take away one of the legs, it is likely that your program will collapse.

Or, think about it this way: If someone else was to implement your program, which pieces would you think—again, based on theory, research, or practice—they should maintain?

When describing your program activities, think carefully about which of these activities are critical to program success. Which pieces of your program do you think (or do theory, research, or practice suggest) will *really* produce change? Which program elements *must* be in place in order for your program to succeed?

Example: SOS Activities

- Show video to students and parents.
- Conduct discussion with students [and parents] about issues surrounding depression and suicide.
- Discuss and model help-seeking strategies.
- Distribute and collect student self-administered screening forms.
- Follow-up on screening results and further assess students who screen positive for depression/suicide.
- Contact parents to make treatment referrals for students, as necessary.

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H.. (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



SOS also describes a number of activities. These include:

- Showing a **video** to students and parents
- Conducting **discussions** with students and parents about issues surrounding depression or suicide
- Discussing and **modeling help-seeking strategies**
- Distributing and collecting student **self-administered screening forms**
- **Following-up** on screening results and further assessing students who screen positive for depression or suicide
- Contacting parents to make treatment referrals for students, as necessary.

A Word About Theory

Evaluations that are guided by theory:

- Concentrate attention and resources on key programmatic aspects.
- Facilitate understanding of how practices or strategies bring about change.
- Make assumptions explicit.
- Influence both policy and popular opinion.



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* Weiss, C. H. (1995). Nothing as practical as good theory: Exploring theory-based evaluation for comprehensive community initiatives for children and families. *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts*. 65-92. Aspen Institute for Humanistic Studies.

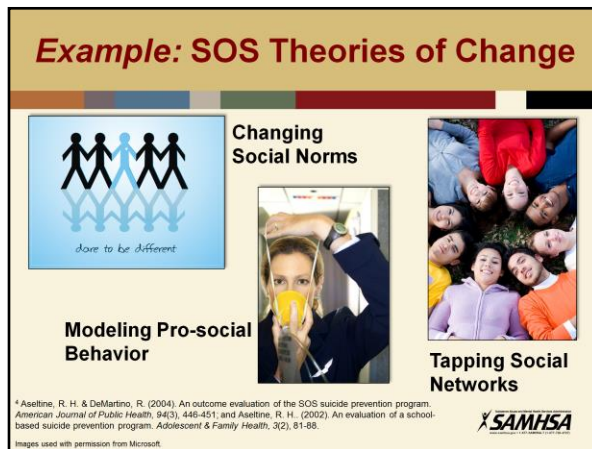


So, let's pause here for a word about theory. In referring to program evaluation, Carol Weiss, a well-renowned researcher (i.e., Author of *Nothing as Practical as Good Theory: Exploring Theory-based Evaluation for Comprehensive Community Initiatives for Children and Families*, 1995), once wrote that "there is nothing as practical as good theory." In fact, she wrote an entire article on this topic. In it, she described four advantages of basing evaluations on theory. According to Weiss, evaluations that are guided by theory:

- Concentrate evaluation attention and resources on key aspects of the program.
- They facilitate grouping of evaluation results into a broader understanding of how practices or strategies work to bring about change.
- They ask program practitioners to make their assumptions explicit and to reach consensus with their colleagues about what they are trying to do and why. (Thus, building a logic model may be a process by which you can pull some of stakeholders to provide input and feedback, creates buy-in to evaluation plan/planning.)
- And finally, evaluations guided by theory may have more influence on both policy and popular opinion.

So, how do logic models fit in? Well, there's no better way to sort out all these relationships or connections between assumptions than with a logic model.

Theory is an integral part of the Service to Science Logic Model. Theory comprises an explicit set of assumptions linked together. Theory "guides health promotion research by providing propositions about what behavioral factors are related to a health problem and what factors are important to address in working on the problem." In other words, what contributes to the problem? And what is the most important contributor (e.g., risk or protective factor) that should be focused on within our prospective programs? The logic model we present here is designed to capture both your *explanatory* theories – your theories for why you think the problem is happening – and your *change* theories – your theories for why you think your program will make a difference. Each program will need to develop its own theoretical framework for why it operates the way it does.



SOS based their program activities on a number of assumptions related to youth development and adolescent behavior change. **“These assumptions are linked to or based on theories of change.”**

First, they assume that when students recognize the symptoms of depression and understand it as a treatable or manageable medical condition, they are less likely to stigmatize those who suffer from mental illness. This assumption led the program to focus on changing social norms.

Second, they assume that students exposed to realistic examples of students seeking help will be better able to adopt these behaviors. This assumption led the program to include video examples that model these pro-social behaviors.

Finally, they assume that during adolescence the peer group becomes the primary sphere of social involvement and emotional investment for most youth. This led the program to include activities that relied on, and tapped into, students’ social networks.]

Note that the logic model we provided earlier as an example does not have a place to delineate these assumptions. However, other logic models do include places for this kind of information. And, though you may not include such statements on your logic model, you should be prepared to discuss them with current potential stakeholders as you explain or walk them through your logic model.

Step 6. Identify Participants

- **Participants are those people and organizations who participate in the activities implemented.**
- **Participants are those who deliver services and receive services.**
- **Participants are important sources of information about service delivery.**



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Now. Step 6. Who participates in your program, or, more specifically, who gets what from whom?

Participants are those people and organizations who participate in the activities implemented.

Participants are those who deliver services and receive services.

Participants are important sources of information about service delivery.

Example: SOS Participants

Who?	Does what?	With/to whom?
School teachers, clinical staff	Show video	Students and parents
School teachers, clinical staff	Conduct discussion	Students and parents
School teachers, clinical staff	Discuss and model help seeking	Students
School clinical staff	Distribute and collect self-administered assessment forms	Students
School clinical staff	Follow-up on assessment results	Students and parents
School clinical staff	Make treatment referrals	Students, parents, and community mental health providers

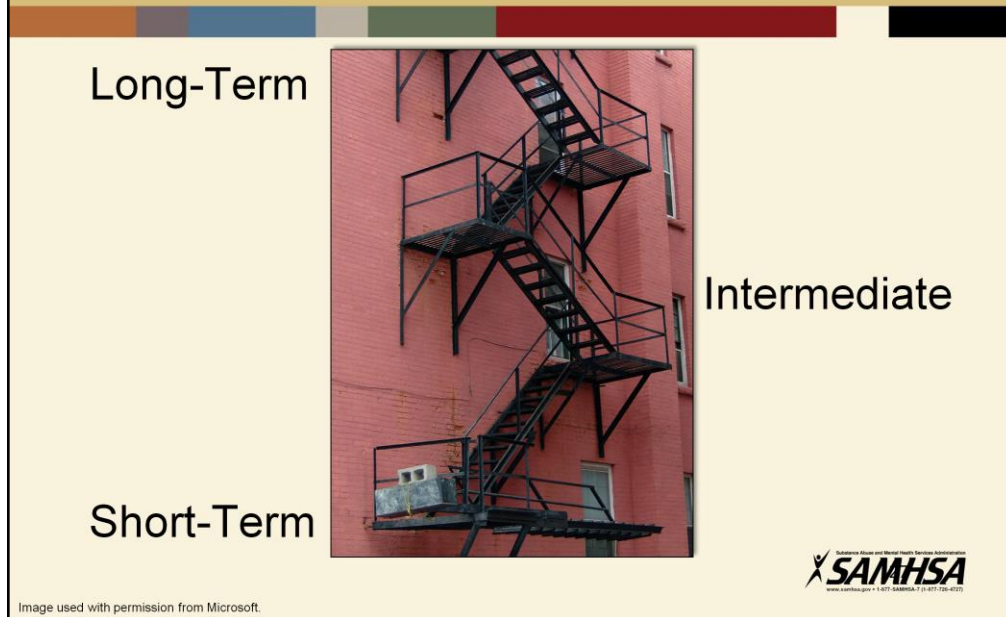
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Let's take a look at what this might look like with our SOS example in terms of "who provides what to whom" or "who does what with whom".

SOS identifies a number of individuals and organizations who help deliver or participate in its program, including students, school clinical staff, parents, community mental health agencies, and school teachers. Each participant or player brings something different to the project.

Step 7. Anticipate Outcomes



Once SOS has identified its activities and with whom, the program logic should next...
Anticipate short-term, intermediate or long-term outcomes.

Short-term outcomes are the immediate program effects that you expect to achieve (e.g., often changes in attitudes or beliefs or risk and protective factors) **AS A RESULT OF PROGRAM ACTIVITIES**. These outcomes often align with your short-term objectives.

Intermediate outcomes are the intermediate program effects you expect to achieve (e.g., often changes in behaviors or skills or problem behaviors). These outcomes often align with your long-term objectives or goals.

Long-term outcomes are the long-term or ultimate effects of the program (e.g., often changes in social conditions that contribute to risk and protective factors and the problem of interest or consequences of the problem behavior)

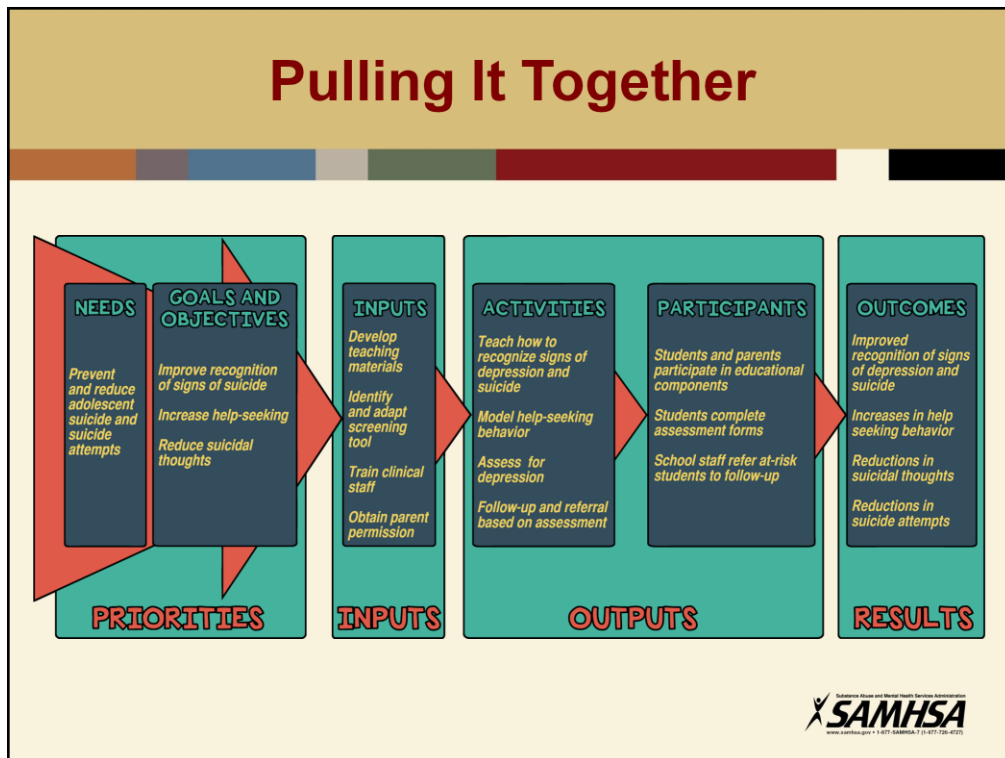
Example: SOS Outcomes

- **In the short-term:** Improved student and parent recognition of signs of depression and suicide (knowledge change)
- **In the intermediate-term:** Increased student help-seeking behaviors (behavior change)
- **In the long-term:** No youth suicide attempts or suicide (behavior change)



So, here we see how SOS delineates its anticipated outcomes as short-, intermediate-, or long-term. They might also add reductions in suicidal thoughts as an intermediate-term outcome. SOS might also consider adding increases in the identification and referral of students at risk for suicide as another intermediate-term outcome.

Can you see how each of these is related to the goals and objectives of the program and the activities implemented that was mentioned earlier? These have strong linkages across the entire logic model. These activities are likely to lead to outcomes intended.



So, here's what a completed logic model **FOR SOS** might look. Please note that some information has been truncated for the purposes of presentation. (In other words, we can't fit everything on the slide.)

You'll see here, too, that we omit the language on need. Need, is typically addressed through a narrative. The overarching need can be described in one or two words in a logic model. For the purpose of the presentation, it is left off. You will definitely want to include that information on your model.

Outputs and Process Measures

How will you know your activities happened as planned?

Process measures, or indicators, provide the evidence you need to determine the extent to which program staff are implementing program activities as they were meant to be implemented (i.e., with fidelity).



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Many programs don't do process evaluation. They don't see the merit. They think that the purpose of evaluation is to find out if a program *works*. But the thing is—you can't say whether a program works unless you *know* that it was implemented as planned. Without a process evaluation, there's no certain way to attribute outcomes to program participation.

Some aspects of implementation will be easier to measure than others. For example, for a multi-session program, it's relatively easy to find out if staff members are running the correct number of sessions.

But it's more difficult to know if staff members are implementing each session as it was *meant* to be implemented—in other words, with *fidelity*.

Let's say, for example, that a critical component of your program involves showing a video to groups of parents. But one day, the VCR breaks. And instead of showing the video, the group leader *describes* the storyline. Clearly, the group leader is not implementing the session with fidelity. However, to find this out you will need to ask the right questions. Or, have someone attend each session with a checklist.

Example: SOS Process Measures

What activity?	How measured?
Show video to students and parents	School Summary Form Questions: (1) Which students/parents saw video/participated in discussion/completed screening forms? (a) Entire student body? (b) Only certain classes or grades? (2) Percent of student body/parents seeing video/participating in the discussion/completing assessment forms?
Discuss video with students and parents	
Distribute and collect self-administered screening tools to students and parents	

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H.. (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



SOS was interested in answering two process questions: How was their program being implemented and what were the reactions of program participants, including students, parents, and teachers.

To answer the first question, they asked their Primary School Contact—or PSC—to complete a School Summary Form which looked at *who* attended the sessions and where they were held.

To answer the second question, they asked the PSC to gauge participant reactions on a scale of very positive, somewhat positive, or negative, and to rate the program materials, including *specific* aspects of the video.

For this project, a better measure of *fidelity* would have been to observe the different program components, as they were being delivered.

Outcomes and Outcome Measures

How will you measure program-produced changes?

Outcome measures, or indicators, provide the evidence you need to determine whether or not your program is reaching its specified objectives and goals.



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Outcome measures, or indicators, provide the evidence you need to determine whether or not your program is reaching its specified objectives.

In most cases, your outcome measures will match your objectives and goals with the addition of *how* outcomes will be assessed.

And remember, if relevant, you will need to identify both short-, intermediate-, and long-term outcome measures that correspond with your short-, intermediate-, and long-term objectives.

Example: SOS Short-term Outcome Measures

What outcome?	How measured?
Increase student knowledge and attitudes about suicide and depression and how they are related	<p>Student self-report on 10 true/false items that reflect central themes of program</p> <p>Student self-report on 8-item summary scale that assessed attitudes toward suicidal people and suicidal behaviors</p>
Increase youth and parent help-seeking beliefs	Student and parent self-report of beliefs about their capabilities to identify symptoms of suicide and depression and to seek treatment in the future

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H., (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.



Now, back to the SOS example. Program participation was expected to lead to changes in attitudes and beliefs about depressing, suicide, and help-seeking.

To measure changes in student knowledge and attitudes about suicide and depression, SOS students were asked to complete a self-report on 10 true/false items that reflected central themes of the program. For example, one statement was “People who talk about suicide don’t really kill themselves.”

Students also completed an 8-item summary scale that assessed attitudes toward suicidal people and behaviors. For example, students were asked to respond to the statement: “If a friend told me he/she is thinking about committing suicide, I would keep it to myself.”

To measure changes in youth and parent help-seeking beliefs, SOS adapted measures from instruments previously used to evaluate school-based suicide prevention programs.

Example: SOS Long-term Outcome Measures

What outcome?	How measured?
Increase teen help-seeking behavior	Student self-report on 3 items about their seeking help for depression or suicide
Decrease suicidal ideation	Student self-report of thoughts about suicide
Decrease suicidal attempts	Student self-report about suicide attempts

⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H., (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.

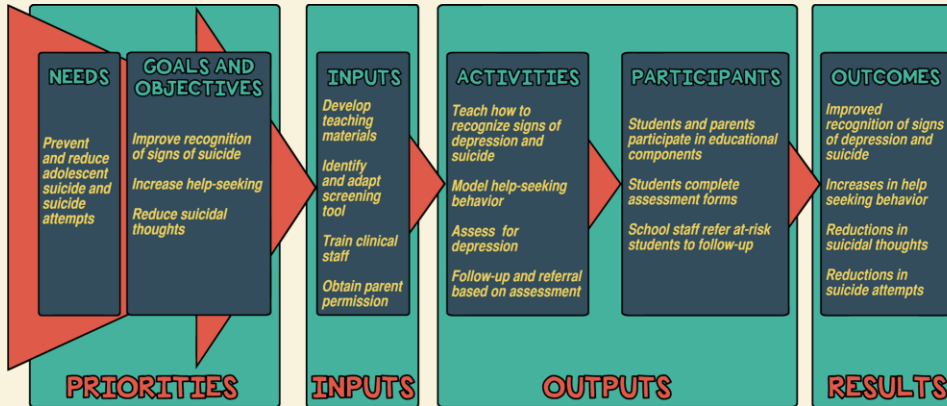


Program participation was also expected to lead to changes in behavior or behavioral interventions.

SOS wanted to find out whether teens who participated in their program were more or less likely to seek help around depression or suicide.

They also wanted to see if suicidal ideation and suicide attempts decreased following program participation.

Pulling It Together



In summary, if we were to draw a line between those short and long-term outcomes and objectives, we can see how our measures demonstrated outcomes which lead to achieving our objectives. And our objectives, then lead to our goals. If our results are positive, we've demonstrated program effects, our program works!

Resources on Logic Modeling

- **University of Wisconsin Extension:**
<http://www.uwex.edu/ces/pdande/evaluation/evallogicmodel.html>
- **Kellogg Foundation Logic Model Guide:**
<http://www.wkkf.org/knowledge-center/resources/2006/02/WK-Kellogg-Foundation-Logic-Model-Development-Guide.aspx>
- **The Community Toolbox**
http://ctb.ku.edu/en/tablecontents/sub_section_main_1877.aspx



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- ² Work Group for Community Health and Development. (2013). *Community tool box*. Retrieved from <http://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/logic-model-development/main>
- ³ U.S. Department of Health & Human Services, Administration for Children and Families. (n.d.). *Protective factors*. Retrieved from <https://www.childwelfare.gov/can/factors/protective.cfm>.
- ⁴ Aseltine, R. H. & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health*, 94(3), 446-451; and Aseltine, R. H. (2002). An evaluation of a school-based suicide prevention program. *Adolescent & Family Health*, 3(2), 81-88.
- ⁵ Centers for Disease Control & Prevention. (2012, November 2). *Develop SMART objectives*. Retrieved from http://www.cdc.gov/phcommunities/resourcekit/evaluate/smart_objectives.html
- ⁶ Weiss, C. H. (1995). Nothing as practical as good theory: Exploring theory-based evaluation for comprehensive community initiatives for children and families. *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts*. 65-92. Aspen Institute for Humanistic Studies.

